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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,853	03/13/2001	Erwin Aguayo JR.	00119-103-USP	2554

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

AKLILU, KIRUBEL

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/804,853

Applicant(s)

AGUAYO ET AL.

Examiner

Kirubel Aklilu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/29/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because more than 150 words are present in the language of the abstract. Correction is required.

See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by

Kermode et al. (U.S. patent # 6,018,359).

1. Regarding **Claim 1**, Kermode teaches a system for management, transmission, and control of video data comprising:

At least one server device (see fig. 1 unit 100 SERVER and col. 5 lines 14-24 "Server 100 stores digitally represented video files and makes these available to subscribers upon request.) for storing video data as video segments and for asynchronously transmitting (see col. 4 lines 6-7 "In accordance with the invention, segments are downloaded asynchronously") said stored video segments in response to user requests (see col. 5 lines 20-23 "Server 100 stores digitally represented video files and makes these available to subscribers upon request");

At least one client device (see fig.1 units 115₁, 115₂ RECEIVER and 117₁, 117₂ BUFFER; col. 5 lines 34-48; "Each receiver has a processor and a memory buffer 117₁, 117₂, for temporary storage of video data received from server 100) for receiving video segments and storing said received video segments for processing and isochronously displaying said received video segments to a user on a display device (see fig. 1 unit 120

Monitor col. 5 lines 44-57 "The contents of buffer 117₁, 117₂ are presented to the subscriber via an associated playback monitor 120₁, 120₂); When the video signals are displayed to the user via monitor 120₁, 120₂, it is inherent that video segments are displayed isochronously.

and

A communication network for transporting said video data (see fig. 1 unit 110 TRANSMISSION MEDIUM col. 5 lines 15-33 "server 100 sends data over a transmission medium 110. Transmission medium 110 may be digital or analog, cable-based or wireless."), wherein said at least one server device and said at least one client device are coupled to said communication network (see col. 5 lines 34-36 "receivers 115₁, 115₂, which are connected to server 100 via transmission medium 110")

Wherein each of said video segments includes a set of assigned attributes (see col. 10 lines 16-18 "dividing the video file into a plurality of sequentially organized data segments, each data segment having an internal temporal order") and video content, said assigned attributes representing control codes and instructions enabling transport, processing, and display of a video segment based solely on said set of attributes without reference to any other video segment. Kermode also teaches on col. 9 lines 37-44 "In a broadcast model, every segment of every available movie is broadcast to every subscriber, regardless of who is actually watching what. In a multicast model, neighborhood distribution

nodes can block delivery unwanted partitions and replace them with partitions from desired movies; this occurs without affecting operation of the servers supplying the video data.” It is inherent that video segments have the attributes that are necessary to transport, process, and display them based solely on their individualized said attributes without reference to any other video segment.

2. As for **Claim 2**, Kermode teaches the system according to claim 1, wherein said video segments are variable length segments (see fig. 5A; col. 6 lines 45-65 “The relative length $L(n)$ of segment n is given by the series function . . .” and col. 8 lines 1-3 “FIG. 5A illustrates the relative length of the successive partitions, with a first segment of unit length.”).
3. As for **Claim 3**, Kermode teaches the system according to claim 1, wherein said control codes and instructions of said attributes includes *viewing sequencing codes*. (see col. 10 lines 16-18 “dividing the video file into a plurality of sequentially organized data segments, each data segment having an **internal temporal order**”). The “internal temporal order” information that is embedded in each segment are inherently codes that are used to reorder the segments in sequence prior to displaying the video content to the user.
4. As for **Claim 4**, Kermode teaches the system according to claim 1, wherein said control codes and instructions of said attributes identify specific designates including *users* (see col. 9 lines 24-36 “movies can be associated with meta-

information categorizing them in some way and used as the basis for filtering to individual subscribers . . .”).

5. As for **Claim 5**, Kermode teaches the system according to claim 1, wherein each of said video segments transported includes a user address (segments that are transmitted in the transmission medium will inherently have user address so as to reach their destination) and wherein said at least one server device dynamically assigns multiple user addresses to video segments to synchronize user requests with video segment transmissions (see col. 9 lines 37-44 “Further bandwidth gains are possible by utilizing a multicast model rather than a broadcast model. . . in a multicast model, neighborhood distribution nodes can block delivery unwanted partitions and replace them with partitions from desired partitions”). In a multicast system, multiple user addresses are assigned to a single video segment.
6. As for **Claims 6-9**, Kermode teaches the system according to claim 1, wherein said video data represents a video program and each of said video segments viewed in sequence represents the complete video program, wherein said at least one server device transmits said video segments in sequence (see col. 4 lines 7-11 “segments are downloaded asynchronously – that is, download of a new segment need not await the arrival of its beginning over the transmission channel. Instead, downloading of the segment may be loaded beginning at any point in the segment, and the data is **reordered** following download or during presentation”). As the segments are reordered prior to being displayed, the

segments are able to arrive to the client without sequence. Thus, the server can transmit the segments in sequence or out of sequence, and the receiver can also receive the segments in sequence or out of sequence.

7. As for **Claim 10**, Kermode teaches a method for management, transmission, and control of video data in a system including a plurality of server devices (see fig. 9 unit 200 TEP MOVIE SERVER; col. 9 lines 45-60 "A 'server farm' of multiple video servers transmits the segments corresponding to several hundred movies), a plurality of client devices (see fig 9 unit 230₁, 230₂, . . . 230_n, TEP STB; col. 9 lines 45-65 "Each subscriber has receiver configured to implement TEP"), and a communications network for transporting video data (see fig. 9 unit 10 EXCHANGE and 215 NEIGHBOURHOOD DISTRIBUTION NODE; col. 9 lines 45-60 "Router 205 is connected to a regional backbone 210 via a high-speed data connection and feeds into a series of distribution nodes . . ."), each of said server devices and each of said client devices being coupled to said communications network (see fig. 9 Unit 205 HIGH SPEED ROUTER, unit 210 EXCHANGE, unit 215 NEIGHBOURHOOD DISTRIBUTION NODE and unit 230 TEP STB; col. 9 lines 45-60 "server 200 transmits segments to a high speed router 205. Router is connected to regional backbone 210 via a high speed data connection 220 . . . each distribution node 215 is connected to 500-1000 individual subscribers"), said method comprising the steps of:

Segmenting video program data into a plurality of video segments
(see col. 4 lines 29-31 "a video file, such as a movie, is divided into a

series of sequentially organized data segments.”), each video segment being assigned a set of attributes (see col. 10 lines 16-18 “dividing the video file into a plurality of sequentially organized data segments, each data segment having an internal temporal order”) representing control codes and instructions for enabling transport, processing, and display of video segments to a plurality of users. Kermode also teaches on col. 9 lines 37-44 “In a broadcast model, every segment of every available movie is broadcast to every subscriber, regardless of who is actually watching what. In a multicast model, neighborhood distribution nodes can block delivery unwanted partitions and replace them with partitions from desired movies; this occurs without affecting operation of the servers supplying the video data.” It is inherent that video segments have the attributes that are necessary to transport, process, and display said video segments to a plurality of users;

Storing said plurality of video segments in said plurality of server devices (see fig. 9 unit 200 TEP MOVIE SERVER; col. 9 lines 45-60 “A ‘server farm’ of multiple video servers transmits the segments corresponding to several hundred movies). It is inherent that the said plurality of video segments (that make up the movies) are stored into TEP MOVIE SERVER ;

Asynchronously transmitting at least one stored video segment from one of the server devices through the communications network (see col. 4 lines 6-7 “In accordance with the invention, segments are downloaded

asynchronously”) to one of the client devices in response to a request by a user of the one client device (see col. 5 lines 20-23 “Server 100 stores digitally represented video files and makes these available to subscribers upon request”);

Receiving said at least one video segment in the client device (see col. 5 lines 59-60 “receivers 115₁, 115₂ receive video data from two channels”);

Storing the received video segment in the client device (see fig. 1 units 117₁, 117₂ BUFFER; col. 5 lines 34-48; “Each receiver has a processor and a memory buffer 117₁, 117₂, for temporary storage of video data received from server 100); and

Isochronously displaying the received video segment on a display device coupled to the client device (see fig. 1 unit 120 Monitor col. 5 lines 44-57 “The contents of buffer 117₁, 117₂ are presented to the subscriber via an associated playback monitor 120₁, 120₂); When the video signals are displayed to the user via monitor 120₁, 120₂, it is inherent that video segments are displayed isochronously.,

Wherein the transmission, processing, and display of the video segment is based solely on the set of attributes without reference to any other video segment. Kermode also teaches on col. 9 lines 37-44 “In a broadcast model, every segment of every available movie is broadcast to every subscriber, regardless of who is actually watching what. In a multicast model, neighborhood distribution nodes can block delivery

unwanted partitions and replace them with partitions from desired movies; this occurs without affecting operation of the servers supplying the video data." It is inherent that video segments have the attributes that are necessary to transport, process, and display them based solely on their individualized said attributes without reference to any other video segment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirubel Aklilu whose telephone number is 703-305-8144. The examiner can normally be reached on 9:00AM - 5:30PM.

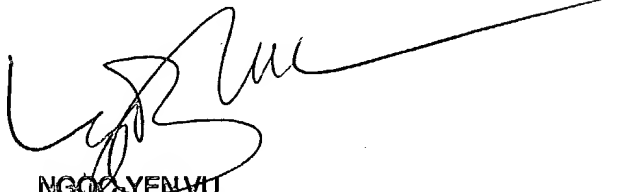
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 703-305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K.A.

November 26, 2004



NGOC YEN VU
PRIMARY EXAMINER